

CLAIMS

1. (Original) An inductive thin film magnetic head, in which: at least a lower magnetic core layer, a nonmagnetic layer and an upper magnetic core layer are laminated on a substrate; each of said lower magnetic core layer and said upper magnetic core layer has a protrusion at an edge portion thereof on a side of a medium facing plane opposed to a magnetic recording medium, which protrudes with a predetermined track width corresponding to a recording track to be formed on said magnetic recording medium; a magnetic gap is formed by disposing each of said protrusions adjacent to each other in a direction of lamination via said nonmagnetic layer; said lower magnetic core layer and said upper magnetic core layer are connected at other edge portions thereof remote from said medium facing plane in a direction of depth therefrom; and a thin film coil is wound around said other edge portions connected, wherein:

said magnetic gap is disposed on said medium facing plane slantingly relative to a direction orthogonal to a scanning direction of said head corresponding to an azimuth angle,

said upper magnetic core layer is disposed on a leading side in the scanning direction of said head, preceding said lower magnetic core layer,

said protrusion on the side of said lower magnetic core layer has an inclined side surface inclined at an angle equal to or greater than said azimuth angle at least on one side in a direction of a track width thereof, and

at least one edge of a side adjacent to said magnetic gap of the protrusion of said upper magnetic core layer is aligned on a line drawn extending from said inclined side surface of said protrusion on the lower magnetic core layer.

2. (Original) A thin film magnetic head according to claim 1, wherein the protrusion of said upper magnetic core layer has an inclined side surface inclined at an angle

equal to or greater than said azimuth angle at least on one side surface thereof aligned on said line extending from said inclined side surface of the protrusion on said lower magnetic core layer.

3. (Original) A thin film magnetic head according to claim 1, wherein a track width of the protrusion on said upper magnetic core layer on a side thereof adjacent to said magnetic gap is equal to or smaller than a track width of the protrusion on said lower magnetic core layer on a side thereof adjacent to said magnetic gap.

4. (Original) A thin film magnetic head according to claim 1, wherein said thin film magnetic head is mounted on a rotary drum and records signals on a tape-shaped magnetic recording medium in a helical scan manner while making sliding contact therewith.

5. (Currently Amended) A magnetic tape drive including means for running a magnetic tape and a recording head for recording signals on the magnetic tape driven by said means for running the magnetic tape while making sliding contact therewith, wherein said recording head is an inductive thin film magnetic head, in which: at least a lower magnetic core layer, a nonmagnetic layer and an upper magnetic core layer are laminated on a substrate; each of said ~~bottom~~ lower magnetic core layer and said upper magnetic core layer has a protrusion on one end portion thereof on a side of a medium sliding contact plane to make a sliding contact with said magnetic tape, which protrudes with a predetermined track width corresponding to a recording track to be formed on said magnetic tape; a magnetic gap is formed by disposing each of said protrusions adjacent to each other via said nonmagnetic layer in a direction of lamination; said lower magnetic core layer and said upper magnetic core layer are connected at the other ends thereof remote from said medium sliding contact plane in a direction of depth

therefrom; and a thin film coil is wound around said other ends thereof connected, wherein:

said thin film magnetic head comprises:

said magnetic gap which is disposed slantingly on said medium facing plane relative to a direction orthogonal to a scanning direction of said head corresponding to an azimuth angle;

said upper magnetic core layer which is disposed on a leading side in the scanning direction of said head preceding said lower magnetic core layer;

said protrusion on said lower magnetic core layer which has an inclined side surface inclined at an angle equal to or greater than said azimuth angle at least on one side thereof in a direction of a track width; and

said protrusion on said upper magnetic core layer which has at least one edge of a side thereof adjacent to said magnetic gap being aligned on a line drawn extending from said inclined side surface of said protrusion on said lower magnetic core layer.

6. (Original) A magnetic tape drive according to claim 5, wherein said protrusion on said upper magnetic core layer has an inclined side surface inclined at an angle equal to or greater than said azimuth angle at least on one side surface thereof which is aligned on a line extending from said inclined side surface of said protrusion on said lower magnetic core layer.

7. (Original) A magnetic tape drive according to claim 5, wherein a track width on a side adjacent to said magnetic gap of said protrusion on said upper magnetic core layer is equal to or smaller than a track width on a side adjacent to said magnetic gap of said protrusion on said lower magnetic core layer.

8. (Original) A magnetic tape drive according to claim 5,

wherein said means for running said magnetic tape includes a rotary drum which is rotated on said magnetic tape wound around an outer periphery thereof, and wherein said thin film magnetic head is mounted on said rotary drum for recording signals on said magnetic tape in a helical scan manner while making sliding contact therewith.